

Lyndsey S. Lefebvre

Woods Hole Oceanographic Institution
Biology Department
266 Woods Hole Road, MS#33
Woods Hole, MA 02543
llefebvre@whoi.edu

EDUCATION

- 2009 College of Charleston, Charleston, SC
M.S. in Marine Biology (Advisor: Michael Denson)
- 2003 University of California Santa Cruz, Santa Cruz, CA
B.S. in Marine Biology (Senior thesis advisor: Peter Raimondi)

RESEARCH EXPERIENCE

- 2020 – present Research Associate II, Biology department, Woods Hole Oceanographic Institution, Woods Hole, MA
- 2017 – 2020 Biologist, under contract to the Fishery Biology Program, Northeast Fisheries Science Center, NMFS, NOAA, Woods Hole, MA
- 2014 – 2017 Staff Research Associate II, under contract to the Groundfish Analysis Team, Southwest Fisheries Science Center, NMFS, NOAA, Santa Cruz, CA
- 2010 – 2014 Laboratory Assistant III, under contract to the Groundfish Analysis Team, Southwest Fisheries Science Center, NMFS, NOAA, Santa Cruz, CA
- 2010 Research Technician, Benthic Ecology Lab, Moss Landing Marine Laboratories, Moss Landing, CA
- 2007 – 2008 Graduate Research Assistant, Marine Resources Research Institute, South Carolina Department of Natural Resources, Charleston, SC
- 2005 Laboratory Technician, Benthic Ecology Lab, Moss Landing Marine Laboratories, Moss Landing, CA

TEACHING & MENTORING EXPERIENCE

- 2022 Llopiz lab mentor for undergraduate intern from Cape Cod Community College
- 2017 – 2018 Professional tutor for biology and human anatomy with the Advantage Program, Cape Cod Community College, Barnstable, MA
- 2012 – 2017 Agency sponsor and mentor for undergraduate and graduate interns and volunteers, SWFSC, Santa Cruz, CA
- 2006 – 2007 Graduate teaching assistant for undergraduate biology, College of Charleston, Charleston, SC
- 2005 – 2006 Science instructor at a non-profit environmental education organization, Marine Science Institute, Redwood City, CA
- 2003 Research assistant for the Pelagic Ecosystem Functions Research Apprenticeship course, University of Washington, Friday Harbor, WA

PEER-REVIEWED PUBLICATIONS (* IN PREP)

- *Lefebvre, L.S., H.M. Sosik, and J.K. Llopiz.** Spawning in the deep: Reproductive life history of four mesopelagic fishes. Submitted to: *Frontiers in Marine Science*.
- *McBride, R.S., S.G. Beyer, C. Conrath, J.C. Field, M. Head5 N. Klibansky, K. Kolmos, L.S. Lefebvre, B. Linton, S. McDermott, S. Neidetcher, J. M. O'Malley, A. Pacicco, E. Schemmel, P. Spencer, C.**

Rodgveller, and M. Wuenschel. *Applied reproductive biology and Ecology of marine fishes: a review of applications for monitoring, assessment, and management*. In preparation for submission to: *Fish and Fisheries*.

- Caiger, P.E., **L.S. Lefebvre**, and J.K. Llopiz. 2021. Growth and reproduction in mesopelagic fishes: a literature synthesis. *ICES Journal of Marine Science* 78:765-781.
- Lefebvre, L.S.**, C. Friedlander, and J.C. Field. 2019. Reproductive ecology and size-dependent fecundity in the Petrale sole (*Eopsetta jordani*) in waters of California, Oregon, and Washington. *Fishery Bulletin* 117:291-302. <https://doi.org/10.7755/FB.117.4.2>
- Lefebvre, L.S.**, S. Beyer, N. Kashef, D. Stafford, E.J. Dick, S. Sogard, and J. Field. 2018. Double or nothing: plasticity in reproductive output in the chilipepper rockfish (*Sebastes goodie*). *Fisheries Research* 204:258-268.
- Lefebvre, L.S.**, A.M. Payne, and J.C. Field. 2016. Reproductive dynamics of Pacific sanddab (*Citharichthys sordidus*). *Journal of Sea Research* 107:100-111.
- He, X., J.C. Field, D.E. Pearson, and **L.S. Lefebvre**. 2016. Age sample sizes and their effects on growth estimation and stock assessment outputs: Three case studies from U.S. West Coast Fisheries. *Fisheries Research* 180:92-102.
- Lefebvre, L.S.** and J.C. Field. 2015. Reproductive complexity in a long-lived, deepwater fish, the Blackgill rockfish. *Transactions of the American Fisheries Society* 144:383-399.
- Lefebvre, L. S.** and M. R. Denson. 2012. Inshore spawning of cobia (*Rachycentron canadum*) in South Carolina. *Fishery Bulletin* 110:397-412.

OTHER PUBLICATIONS

- Lefebvre, L.S.**, E. Robillard, M.C. Palmer, R.S. McBride. 2021. Evaluating otolith growth patterns to discriminate among subpopulations of Northwest Atlantic cod (*Gadus morhua*): applicability of a new model to NEFSC bottom trawl survey samples. US Department of Commerce, Northeast Fisheries Science Center Reference Document 21-06. 21p. <https://doi.org/10.25923/gwtd-2r8>
- He, X., J.C. Field, D.E. Pearson, **L. Lefebvre**, and S. Lindley. 2015. Status of bocaccio, *Sebastes paucispinis*, in the Conception, Monterey and Eureka INPFC areas for 2015. Pacific Fishery Management Council.
- Pearson, D.E., **L.S. Lefebvre**, and X. He. 2015. Developing age determination criteria for bocaccio (*Sebastes paucispinis*). NOAA Technical Memorandum. NMFS-SWFSC-541. 24p.
- Xi, H., D.E. Pearson, J.C. Field, **L. Lefebvre**, and M. Key. 2013. Status of the U.S. Pacific Sanddab Resource in 2013. Pacific Fishery Management Council.

CONFERENCE PRESENTATIONS & WORKSHOPS

- 2024 American Fisheries Society (AFS) Annual Meeting. Honolulu, HI. Invited oral presentation in symposium: Lessons in Fish Reproduction for Sustainable Fisheries: Learning from multiple knowledge sources. *Spawning in the Deep: Reproductive biology insights of four mesopelagic fishes*.
- 2024 ICES Annual Science Conference. Gateshead, U.K. DNA metabarcoding of fish predator diets: insights and applications for mesopelagic food webs and deep-sea ecosystems. Coauthor (A. Buklin, 1st author).
- 2024 Ocean Sciences Meeting. New Orleans, LA. DNA metabarcoding of fish diets and food webs in the mesopelagic. Coauthor (poster; V. You, 1st author).
- 2023 National Stock Assessment Workshop (NSAW) and Maturity Assessment, Reproductive Variability and Life Strategy working group joint meeting. Providence, RI. Coauthor of Keynote

- presentation. *Reproductive Biology of fish: applications for research, monitoring, assessment, and management* (R. McBride, 1st author).
- 2023 Maturity Assessment Reproductive Variability and Life Strategy Group quarterly seminar. Virtual. Invited presenter. *Reproduction in Sebastes*.
- 2021 Maturity Assessment Reproductive Variability and Life Strategy Group Biennial Workshop. Virtual. Organizer, facilitator, and presenter. *Gonad Histology Review QA/QC Exercise*.
- 2018 20th Western Groundfish Conference. Monterey, CA. *Back to basics: Why basic life history data still matter in an age of advanced population modeling*.
- 2016 PICES Annual Meeting. San Diego, CA. *Plasticity in reproductive strategies for rockfish in the Southern California Current*. (poster)
- 2016 19th Western Groundfish Conference. Newport, OR. *Double or nothing: within population deviations in reproductive strategy in Chilipepper rockfish (Sebastes goodei)*.
- 2015 American Fisheries Society Annual Meeting. Portland, OR. *Double or nothing: within population deviations in reproductive strategy in Chilipepper rockfish (Sebastes goodei)*.
- 2014 9th International Flatfish Conference. Cle Elum, WA. *Doin' it well: the life and reproductive times of Pacific sanddab, Citharichthys sordidus*.
- 2014 Maturity Assessment Reproductive Variability and Life Strategy Group Workshop. Seattle, WA. *Interpreting complex reproductive biology: a case study in Blackgill rockfish*.
- 2012 17th Western Groundfish Conference. Seattle, WA. *Adolescent blackgill blues: an investigation into anomalies in ovarian development of Sebastes melanostomus*.
- 2012 CalCOFI Annual Conference. Pacific Grove, CA. *Breaking the cycle: anomalies in ovarian development of blackgill rockfish, Sebastes melanostomus*. (poster)
- 2008 South Carolina Chapter of the American Fisheries Society Annual Meeting. Santee, SC. *Reproductive dynamics of cobia, Rachycentron canadum, in Port Royal Sound and St. Helena Sound, South Carolina*.
- 2008 College of Charleston Student Research Colloquium. Charleston, SC. *Reproductive dynamics of cobia, Rachycentron canadum, in Port Royal Sound and St. Helena Sound, South Carolina*.

REFEREE FOR PUBLICATIONS

Journal of Fish Biology
 Environmental Biology of Fishes
 Marine Ecology Progress Series
 Fishery Bulletin
 CalCOFI Reports
 Transactions of the American Fisheries Society
 California Department of Fish and Wildlife
 Monterey Bay Aquarium Seafood Watch

RESEARCH CRUISE PARTICIPATION

- 2022 RV Atlantis: Northeast US Shelf Long-Term Ecological Monitoring Ecological Research project (NES-LTER), WHOI, Northeast US, (6 days)
- 2021 RV Endeavor: NES-LTER, WHOI, Northeast US (6 days)
- 2020 RV Neil Amstrong: Ocean Twilight Zone cruise, WHOI, Northeast US (5 days)
- 2018 NOAA Henry B. Bigelow: Bottom Trawl Survey, NEFSC, Gulf of Maine (13 days)
- 2017 NOAA Reuben Lasker: Juvenile Rockfish Recruitment and Ecosystem Assessment Survey (RREAS), SWFSC, California Current (11 days)
- 2016 FV Alaska Knight: Eastern Bering Sea Bottom Trawl Survey, AFSC, Bering Sea, AK (22 days)
- 2016 NOAA Reuben Lasker: RREAS, SWFSC, California Current (24 days)

- 2015 RV Ocean Starr: RREAS, SWFSC, California Current (15 days)
- 2014 RV Ocean Starr: RREAS, SWFSC, California Current (21 days)
- 2013 RV Ocean Starr: RREAS, SWFSC, California Current (14 days)
- 2005 FV Gladiator: Gulf of Alaska Bottom Trawl Survey, AFSC, Gulf of Alaska (23 days)

NEARSHORE VESSEL OPERATIONS

- 2012 – 2017 22’ Boston Whaler, outboard; biological sampling in Monterey Bay, CA
- 2010 21’ Boston Whaler, outboard; biological sampling & SCUBA dive operations in San Francisco Bay, CA
- 2007 – 2008 17’ and 21’ Boston Whalers, outboard; ichthyoplankton and biological sampling in Port Royal Sound and St. Helena Sound, SC
- 2001 – 2007 Various (12’ – 26’) Boston whalers, inflatable outboards, aluminum skiffs, and inboard vessels for SCUBA dive operations (Monterey Bay, CA; Channel Islands, CA; Moorea, French Polynesia); midwater trawl sampling (San Joaquin River, CA); and plankton sampling (San Juan Islands, WA)

OUTREACH

- 2024 “Twilight Zone: Hidden Wonders of the Ocean”; Docent training, attendance at exhibit opening. Artechouse DC & WHOI OTZ Project. Washington, DC.
- 2024 “Diving into the Twilight Zone”; WHOI OTZ middle-high school curriculum development. WHOI OTZ Project. Woods Hole, MA.
- 2023 “Behind the Scenes at WHOI” in association with the Ocean Encounters Event “Becoming a Marine Biologist”. WHOI and SeaGrant. Woods Hole, MA.
- 2023 Falmouth Public Library and Eight Cousins Bookshop. Book reading “Where the Weird Things Are”. WHOI OTZ Project. Falmouth, MA.
- 2022 Keith Middle School outreach. Deep Sea Adaptations. WHOI Committee for Diversity, Equity, and Inclusion. New Bedford, MA.
- 2021 NOAA Live! Webinar. A strange and mysterious hidden world: the Ocean Twilight Zone. WHOI SeaGrant. Online.
- 2010 - 2015 Squids4Kids. Stanford Hopkins Marine Station & Southwest Fisheries Science Center Santa Cruz, CA.

PROFESSIONAL ACTIVITIES

- 2014 - present MARVLS (Maturity Assessment Reproductive Variability and Life Strategies), Steering committee member
- 2008 Early Life History of Marine Fishes, University of New England, Biddeford, ME; course participant

PROFESSIONAL ORGANIZATIONS

- Sigma Xi
- The American Fisheries Society

HONORS & AWARDS

- 2008 Nominee for membership, Sigma Xi, The Scientific Research Honor Society
- 2008 Best Student Paper, SCAFS Annual Meeting
- 2003 Honors Senior Thesis, UC Santa Cruz
- 2003 Honors in the Major, UC Santa Cruz
- 2003 College Honors, UC Santa Cruz

CERTIFICATIONS

AAUS Scientific Diver Certification (not current)

NAUI Master Diver

NAUI Rescue Diver

NAUI Advanced Diver

NOAA Small Boat Operator

U.S. Fish and Wildlife Service Motor Boat Operator Certification Course

NOAA Small Boat Component Course

CA Boater Safety

SC Boater Safety